AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

- 1. (Original) In a data processing system having a cache, a method for generating uncached objects comprising:
 - (a) locating at least one component that is related to an uncached object; and
 - (b) constructing, by the cache, the uncached object from the located at least one component.
 - 2. (Original) The method of claim 1 wherein step b further comprises obtaining the located at least one component.
- 3. (Original) The method of claim 1 further comprising obtaining the at least one component from the cache and a second component from a storage system.
- 4. (Currently Amended) The method of claim 1 further comprising obtaining the at least one component and the a second component from a storage system.
- 5. (Original) The method of claim 1 further comprising deriving the at least one component from an object.
- 6. (Original) The method of claim 1 further comprising storing the constructed object in the cache.
- 7. (Original) The method of claim 1 further comprising generating, by the cache, a request for the object.
 - 8. (Original) The method of claim 1 wherein the object is an image file.



- 9. (Original) The method of claim 8 wherein the image file is a JPEG-2000 file.
- 10. (Original) The method of claim 1 wherein the at least one component is an images file.
 - 11. (Original) The method of claim 10 wherein the image file is a JPEG-2000 file.
 - 12. (Original) The method of claim 1 wherein the object is web page.
- 13. (Original) The method of claim 1 wherein the at least one component is a web page.
 - 14. (Original) The method of claim 1 wherein the object is a document.
- 15. (Original) The method of claim 1 wherein the at least one component is a document.
 - 16. (Currently Amended) A cache system comprising:
 - a cache memory storing one or more objects;
- <u>a</u> logic element <u>determining that that determines if</u> an object is missing from the memory; and
- a processor obtaining that obtains at least one component related to the missing object and constructing constructs the object in response to the logic element determining that the object is missing from the cache memory.
- 17. (Original) The cache system of claim 16 wherein obtaining the at least one component further comprises obtaining the at least one component from an object.
 - 18. (Original) The cache system of claim 16 wherein the object is an image file.



- 19. (Original) The cache system of claim 18 wherein the image file is a JPEG-2000 file.
- 20. (Original) The cache system of claim 16 wherein the component is an image file.
- 21. (Original) The cache system of claim 20 wherein the image file is a JPEG-2000 file.
 - 22. (Original) The cache system of claim 16 wherein the object is a web page.
- 23. (Original) The cache system of claim 16 wherein the component is a web page.
 - 24. (Original) The cache system of claim 16 wherein the object is a document.
 - 25. (Original) The cache system of claim 16 wherein the component is a docment.
- 26. (Original) The cache system of claim 16 wherein a request is generated by the cache system.
 - 27. (Original) The cache system of claim 16 wherein the cache system is a server.
- 28. (Original) The cache system of claim 27 wherein the request is generated by a client.
- 29. (Original) The cache system of claim 16 wherein the logic element determining the requested object is missing from the cache memory:
 - (a) further determining if the components to construct the requested objects are in the cache memory; and
 - (b) further determining the components missing from the cache memory



required from the storage device to construct the object.

- 30. (Original) The cache system of claim 29 wherein the cache system is generating request for an object.
- 31. (Currently Amended) In an image server having a cache, a method for obtaining an image comprising:
 - (a) obtaining the image from the cache, if the image is present within the cache, otherwise, the image server having the capability of:
 - (b) constructing the image from one or more cache image components, if the cache has one or more cache image components from which the image can be produced, otherwise,
 - (c) determining whether to construct the image using an uncached image component stored in a remote storage.
- 32. (Original) The method of claim 31 further comprising constructing the image from the uncached image component stored in remote storage and one or more cached image components, upon determining to construct the image using the uncached image component.
- 33. (Original) The method of claim 31 further comprising constructing the image from the remote stored image component upon determining to construct the image using the uncached image component stored in the remote storage.
- 34. (Original) The method of claim 31, further comprising obtaining the image from the remote storage if it is determined not to construct the image.
 - 35. (Original) The method of claim 31 wherein the image is a JPEG 2000 image.
- 36. (Currently Amended) In an image server having a cache, a method for obtaining an image comprising obtaining the image from the cache, if the image is present within the cache, otherwise the image server is adapted to constructing the image from



components obtained from one of the cache only, remote storage only, and a combination of the cache and the remote storage.

- 37. (Original) The method of claim 36 wherein the image is a compressed image.
- 38. (New) An image processing method comprising:
 receiving a request for an object;
 determining if one or more portions of the object are cached;
 determining if the one or more portions are sufficient to reconstruct the object; and
 reconstructing the object based on one or more of one or more cached portions and
 one or more requested portions.
- 39. (New) The method of claim 38, wherein the one or more cached portions and the one or more requested portions are rendered.
 - 40. (New) The method of claim 38, wherein the one or more portions are a packet.
- 41. (New) The method of claim 40, wherein the packet comprises spatial location information, color channel information, resolution information and quality information.
- 42. (New) The method of claim 38, wherein the object is at least one of a web page, an image, a document and a compound document.
- 43. (New) A method of generating uncached objects in a data processing system having a cache comprising:

locating at least one component that is related to an uncached object, wherein the uncached object comprises a plurality of components that are each individually identifiable and accessible; and

constructing, by the cache, the uncached object from the located at least one component.



44. (New) A method of generating uncached objects in a data processing system having a cache comprising:

locating at least one component, of a plurality of components, that is related to an uncached object; and

constructing, by the cache, the uncached object from the located at least one component.

45. (New) A method of generating uncached objects in a data processing system having a cache comprising:

locating at least one portion, of a plurality of portions, that is related to an uncached object; and

constructing, in cooperation with the cache, the uncached object from the located at least one portion.

46. (New) A method of generating uncached objects in a data processing system having a cache comprising:

locating at least one component that is related to an uncached object, the at least one component comprising a component tag and a component payload; and

constructing the uncached object from the located at least one component.

